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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/001,558 | 10/24/2001 | Shimei Fan | J6650(C) | 7685 |
| 201 | 7590 | 10/21/2003 | EXAMINER | |
| UNILEVER PATENT DEPARTMENT 45 RIVER ROAD EDGEWATER, NJ 07020 | | | BAHAR, MOJDEH | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 1617 | |
| DATE MAILED: 10/21/2003 | | | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/001,558

Applicant(s)

FAN ET AL.

Examiner

Mojdeh Bahar

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 13-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 13-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____. 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on August 8, 2003 has been entered.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-7 and 13-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reid et al. (USPN 5,085,857) in view of Porter et al. (*Handbook of Surfactants*, pp.145-146, 1991).

Reid et al. (USPN 5,085,857) teaches an aqueous shampoo composition comprising, in addition to water from 2-40% by weight of a surfactant chosen from anionic, nonionic or amphoteric surfactants or mixtures thereof, from 0.01% to 3% by weight of cationic conditioning polymer which is a cationic derivative of guar gum, from 0.01 to 10% by weight of an insoluble, non-volatile silicone, present as emulsified particles with an average particle size of less than 2 micrometers, see col. 1 line 67-col.2, line 8. Suitable anionic surfactants are alkyl sulfates, alkyl ether sulfates, alkaryl sulfonates, alkyl succinates, alkyl sulfosuccinates, N-alkoyl sarcosinates, alkyl phosphates, alkyl ether phosphates, alkyl ether carboxylates, and alpha-olefin sulfonates, see col. 2, lines 24-36. The amphoteric surfactants suitable for use in the composition of the invention are alkyl amine oxides, alkyl betaines, alkyl amidopropyl betaines, alkyl sulfobetaines, alkyl glycinate, alkyl carboxyglycinates, alkyl amphopropionates, alkyl amidopropyl hydroxysultaines, acyl taurates and acyl glutamates wherein the alkyl and acyl groups have from 8 to 10 carbon atoms. Examples include lauryl amine oxide, cocodimethyl sulfopropyl betaine and preferably lauryl betaine, cocamidopropyl betaine and sodium cocamphopropionate, see col.2, lines 58-68. The non-ionic surfactants suitable for use in the composition of Reid et al. are condensation products of aliphatic (C8-C18) primary or secondary linear or branched chain alcohols or phenols with alkylene oxides, usually ethylene oxide and generally 6-30 EO. Other suitable surfactants are mono or di alkyl alkanolamides or alkyl polyglucosides. Examples include coco mono or diethanolamide, coco mono isopropanolamide, and cocodiglucoside, see col. 2, lines 47-57. Reid et al. further teaches that the cationic conditioning polymer is a cationic derivative of guar gum, e.g., hydroxypropyl trimonium chloride, see col.3, lines 5-28. Reid et al also teaches that the shampoo composition of its invention also comprises an insoluble non-

volatile silicone which may be one or more polyalkyl siloxanes, polyalkylaryl siloxanes or mixtures thereof, specific examples include polydimethyl siloxane, see col. 3 line 31-68. Reid et al. also teaches that the average silicone material in this emulsion is less than 2 micrometers, preferable between 0.01 and 1 micrometer, see col. 4, lines 1-9. Reid further teaches that any surfactant material either alone or in admixture may be used as emulsifiers in the preparation of silicone emulsions. Preferred emulsifiers are anionic emulsifiers, see col. 4, lines 15-37. Reid et al. finally teaches that its shampoo composition may also include perfumes, dyes, coloring agents, viscosity modifiers, and herb extracts, see col. 5, lines 11-22, see also claims 1-7.

Reid et al. does not teach the particular percentages of the co-surfactant herein. Neither does it particularly teach ethoxylated cocomonoethanolamide.

Porter et al. (*Handbook of Surfactants*, pp.145-146, 1991) teaches that the addition of ethylene oxide to alkanolamides improves dispersability or solubility in water. Porter further teaches that the function of ethoxylated alkanolamides in cosmetic products is similar to alkanolamides as to thickening and foam stabilizing, but possesses improved dispersability, see page 145-146.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to employ co-surfactants in the percentages claimed herein. It would have also been obvious to employ ethoxylated alkanolamides in lieu of alkanolamides.

One of ordinary skill in the art would have been motivated to employ co-surfactants in the percentages claimed herein because the co-surfactants are known to be useful in shampoo composition and optimization of amounts in within the purview of the Skilled Artisan. The Skilled artisan would have been motivated to employ ethoxylated alkanolamides in lieu of

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alkalonomides, i.e., ethoxylated cocomonoethanolamide in lieu of cocomonoethanolamide because ethoxylation is known to improve dispersibility, therefore resulting in a more uniform emulsion.

Response to Arguments

Applicant's arguments with respect to the obviousness rejection have been considered but are moot in view of the new ground(s) of rejection.

Applicants aver unexpected benefits residing in the claimed subject matter, yet fail to set forth evidence substantiating this belief. Evidence as to unexpected benefits must be "clear and convincing" *In re Lohr*, 137 USPQ 548 (CCPA 1963), and be of a scope reasonably commensurate with the scope of the subject matter claimed, *In re Linder*, 173 USPQ 356 (CCPA 1972). The data provided by Applicants is not reasonably commensurate in scope with the instant claims. Note that the claims recite a co-surfactant which is an ethoxylated cocomonoethanolamide with EO ranging from 2 to about 12, whereas the data on pages 13-16 show EO of 2-5. Absent claims commensurate with the showing of unexpected benefits, or a showing reasonably commensurate with the instant claims, such claims remain properly rejected under 35 USC 103.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mojdeh Bahar whose telephone number is (703) 305-1007. The examiner can normally be reached on (703) 305-1007 from Monday to Friday from 9:00 a.m. to 5:00 p.m.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreeni Padmanabhan, can be reached on (703) 305-1877. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-4556.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1235.

10/17/03

Mojdeh Bahar
Patent Examiner
October 17, 2003